

IN THE CLAIMS:

[[1)]] 1. (Currently Amended) An apparatus ~~Apparatus~~ for the air circulation in double-glazed thermoinsulated walls, of the type constituted at least by a first internal pane (2) of glass and by a second external pane (3) of glass, positioned parallel to one another and defining a space (4) between them, characterized in that it comprises the apparatus comprising:

5 double-glazed thermoinsulated walls including at least an internal glass pane and an external glass pane, said internal glass pane being positioned parallel to said external pane such that said internal glass pane and second external glass pane define a space;

an air inlet opening exclusively in communication with said space and an inside environment [[(4)], ~~in connection with the inside and positioned~~ said air inlet opening being
10 located at the bottom of said internal glass pane (2) of glass;

an air outlet opening [[(24),]] in ~~connection~~ communication with the outside environment and positioned located at the top of said external glass pane (3) of glass;

a tangential fan [[(11)]] of reduced size ~~extended~~ extending substantially [[to]] the full length of one of the thermoinsulated walls, said tangential fan being located within [[(1)]] and
15 fitted in a fan housing (12); defined at the top of said space, said tangential fan (4) and having a longitudinal opening ~~turned to~~ in communication with said space [[(4),]] for [[the]] air intake from the inside environment ~~through the same space, said fan being actuated such that air flows~~
from said inside environment exclusively through said inlet opening into said space and exits
into said outside environment via said outlet opening, whereby said space has a temperature
20 equal to a temperature of said inside environment (4), and opened to the outside through said

air outlet opening (24).

[[2)]] 2. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 1, ~~characterized in that wherein~~ said fan [[(11)]] is suited to be driven at low rotational speed by an electrical motor drive fitted at an end of said housing [[(12)]]].

[[3)]] 3. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 2, ~~characterized in that it comprises~~ further comprising sensors detecting the hygrothermal conditions of the air, suited to control the start of said electrical motor drive activating said fan [[(11)]]].

[[4)]] 4. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 1, ~~characterized in that at~~ wherein said fan housing defines a fan outlet opening, said fan outlet opening being closed via ~~of said housing (12)~~ a swinging closing member (17) ~~is fitted in order to prevent for preventing~~ air from flowing back to the interior environment when said fan is not operative.

[[5)]] 5. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 1, ~~characterized in that wherein~~ said fan housing [[(12)]] is defined by a substantially cylindrical sector [[(16)]] shaped by a bearing element [[(13)]] provided, in assembled setting, with a longitudinal opening turned to said space [[(4)]] for the air intake through the space ~~(4)~~ itself,

5 and with an opposed opening for the air outlet to the outside.

[[6)]] 6. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 5, characterized in that wherein said bearing element [[(13)]] is removably constrained to a frame [[(14)]] which is steadily fixed peripherally to one of said thermoinsulated walls [[(1)]].

5 [[7)]] 7. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 6, characterized in that wherein said frame [[(14)]] is steadily fixed to a spacing means [[(7)]] fitted between said second external pane [[(3)]] of glass and an intermediate pane [[(5)]] of glass, said second external pane being parallel to the intermediate pane such that said second external pane and said intermediate pane ~~other one, which is suited to~~ define a room [[(6)]] inside the space [[(4)]], which is turned to the outside, for the insertion of a dimming element.

5 [[8)]] 8. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 6, characterized in that wherein said frame [[(14)]] is provided with an opening turned to the inside, at the top of said space [[(4)]], and with an opposite external hole [[(24)]] for the air outlet, said opening and said external hole being both longitudinally extending extended to substantially the full length of the same frame [[(14)]].

[[9)]] 9. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 8, characterized in that wherein said opening turned to the inside of said frame [[(14)]] is closed

by a removable inspection door, said inspection door defining a lower (23) ~~lowerly~~ shaping a groove (25) which is suited to ~~engage the~~ for engaging an upper edge of said internal pane
5 ~~[[(2)]]~~ of glass by the interposition of a gasket means ~~[[(26)]]~~, and ~~upperly~~ shaping said
inspection door defining a curved portion (27) which is suited to hook for engaging a
corresponding folded edge of the ~~[[same]]~~ frame ~~[[(14)]]~~.

~~[[(10)]]~~ 10. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 6,
characterized in that wherein a modular covering element ~~[[(28)]]~~ is fitted externally to said
frame, said modular covering element extending (14) ~~extended to~~ the full length of said
thermoinsulated wall, said modular covering element defining (1) ~~and shapes lowerly~~ a lower
5 longitudinal opening ~~[[(29)]]~~ for the air outlet.

~~[[(11)]]~~ 11. (Currently Amended) ~~Apparatus~~ An apparatus according to claim 5,
~~characterized in that~~ wherein said bearing element ~~[[(13)]]~~ is constituted by a light metal
section.

12. (New) An apparatus for circulating air, the apparatus comprising:

double-glazed thermoinsulated walls including an internal glass pane having a bottom
portion and an external glass pane having a top portion, said bottom portion of said internal
glass pane defining an air inlet opening, said air inlet being exclusively in communication with
5 said space and an inside house environment;

a frame structure defining an air outlet opening in communication with an outside house environment, said air outlet opening being located adjacent said top portion of said external glass pane, said internal glass pane being positioned parallel to said external glass pane such that said internal glass pane is opposite said external glass pane, said internal glass pane, said external glass pane and said frame structure defining an airflow space;

a fan housing located within said frame structure, said fan housing being disposed opposite said air outlet;

a tangential fan of reduced size extending substantially the full length of one of said thermoinsulated walls, said tangential fan being located within said fan housing, said tangential fan having a longitudinal opening in communication with said airflow space for air intake from said inside house environment via said air inlet opening;

an electrical motor located at an end of said fan housing for actuating said tangential fan;

sensors detecting hygrothermal conditions of air, said electrical motor controlling a rotational speed of said tangential fan based on the hygrothermal conditions of said air sensed via said sensors such that air flows exclusively from said inside environment through said space to said outside environment via said outlet opening to maintain a temperature of said space equal to a temperature of said inside environment.

13. (New) An apparatus according to claim 12, wherein said fan housing defines a fan outlet opening, said fan outlet opening being closed via a closing member pivotably connected to said fan housing for preventing air from flowing back to the interior environment

when said fan is not actuated.

14. (New) An apparatus according to claim 12, wherein said fan housing is substantially cylindrical, said fan housing defining a longitudinal opening in communication with said space for receiving air from said inside house environment, said fan housing defining an opening opposite said longitudinal opening for exhausting to the outside environment via said air outlet.

15. (New) An apparatus according to claim 14, further comprising a spacing element fixed to said frame structure, said double-glazed walls including an intermediate glass pane, said spacing element being connected to said intermediate glass pane and said external glass pane such that said intermediate glass pane is located at a spaced location from said external glass pane to define another interior glass space for receiving a dimming element, said external glass pane being parallel to said intermediate pane.

16. (New) An apparatus according to claim 14, wherein said air outlet opening extends substantially the full length of the frame structure.

17. (New) An apparatus according to claim 16, wherein a removable inspection door is connected to said frame structure, said removable inspection door defining a lower groove, said lower groove having a gasket located therein, said lower groove receiving an upper edge

of said internal glass pane such that said gasket engages said upper edge of said internal glass pane, said inspection door defining a curved portion, said curved portion engaging a corresponding folded edge of said frame.

18. (New) An apparatus according to claim 14, wherein a modular covering element is connected externally to said frame, said modular covering element extending the full length of one of said thermoinsulated walls, said modular covering element defining a lower longitudinal opening in communication with the air outlet opening.

19. (New) An apparatus for circulating air, the apparatus comprising:

double-glazed thermoinsulated walls including a first glass pane and a second glass pane, said first glass pane having a surface exposed to a house interior environment, said second glass pane having a second glass pane surface exposed to an outside environment external to said house interior environment, said first glass pane being parallel to said second glass pane such that said first glass pane and said second glass pane define an interior glass pane space, said first glass pane having a bottom first glass portion defining an air inlet, said second glass pane having a top second glass portion;

a frame structure defining an exhaust outlet located opposite said top second glass portion;

a fan housing located within said frame structure;

a tangential fan located within said fan housing, said tangential fan extending

substantially along one of said double-glazed thermoinsulated walls, said tangential fan being in communication with said interior glass pane space and said exhaust outlet, said air inlet being in communication with only said interior glass pane space and said house interior environment and said exhaust outlet being in communication with said outside environment to define an air flow path, said tangential fan being actuated such that air flows from said house interior environment to said outside environment via said air flow path, said interior glass pane space having a temperature equal to a temperature of said house interior environment.

20. (New) An apparatus according to claim 19, further comprising:

an electrical motor connected to said tangential fan;

a plurality of sensors, each sensor detecting hygrothermal conditions of air, said electrical motor actuating said tangential fan such that said fan draws air only from said house interior environment based on said hygrothermal conditions detected by said plurality of sensors.